



*Ministry of Economy, Trade and Industry*

# **Connected Industries**

Achievements, Challenges and Next Steps in  
Japan's smart Manufacturing

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Ministry of Economy, Trade and Industry (METI)  
JAPAN

## Concept

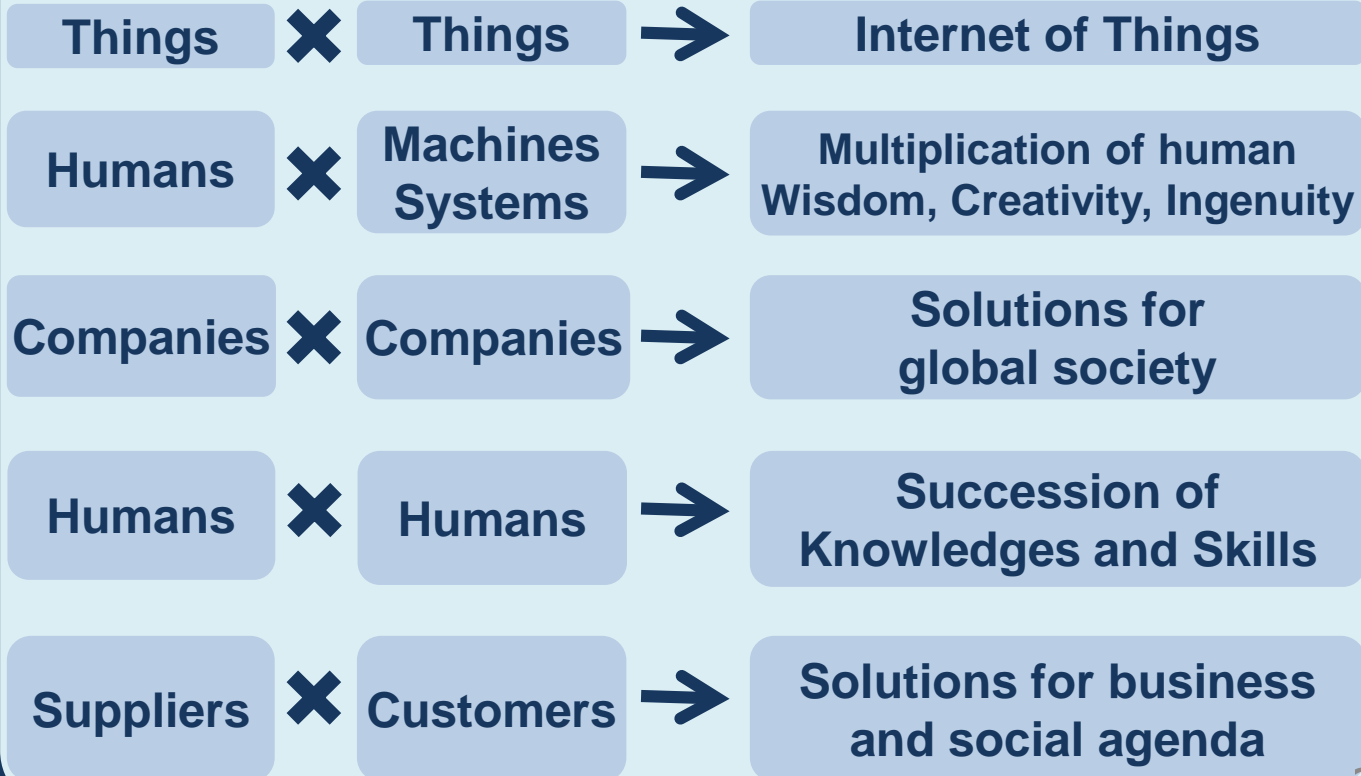
*Humans, Machines and Technologies are **CONNECTED**  
Across borders and generations  
and **NEW VALUE** is generated continuously*

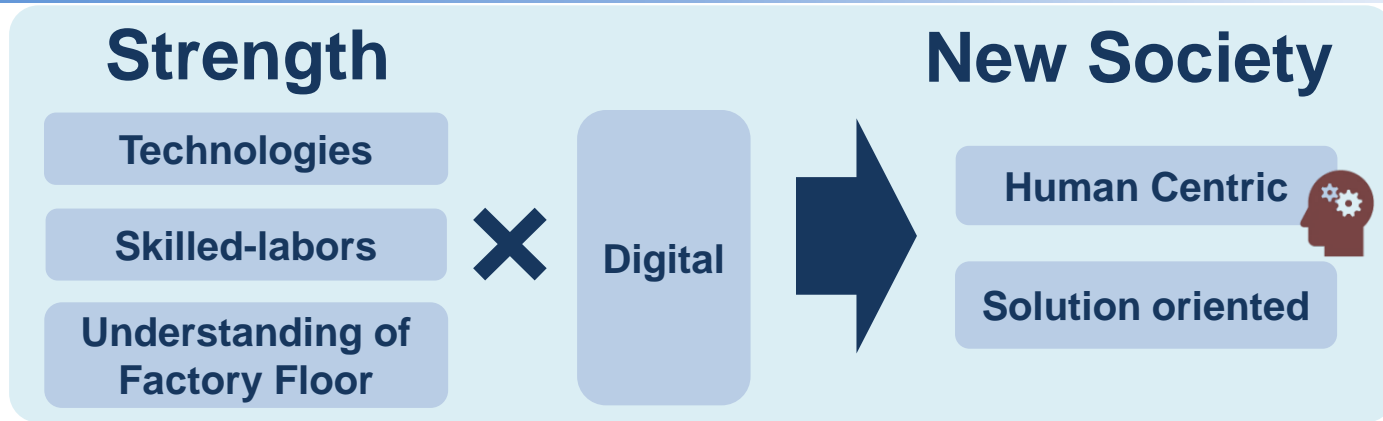
**Connected-  
ness**



**New Value**

## Examples





## Pillars

1

### New Digital Society

-- Humans and Machines/Systems work together --

- New Technologies (e.g. AI & Robotics) are tools for solution.
- Utilize those technologies to maximize Humans abilities

2

### Multilevel Cooperation

-- Across Regions, Borders and Time --

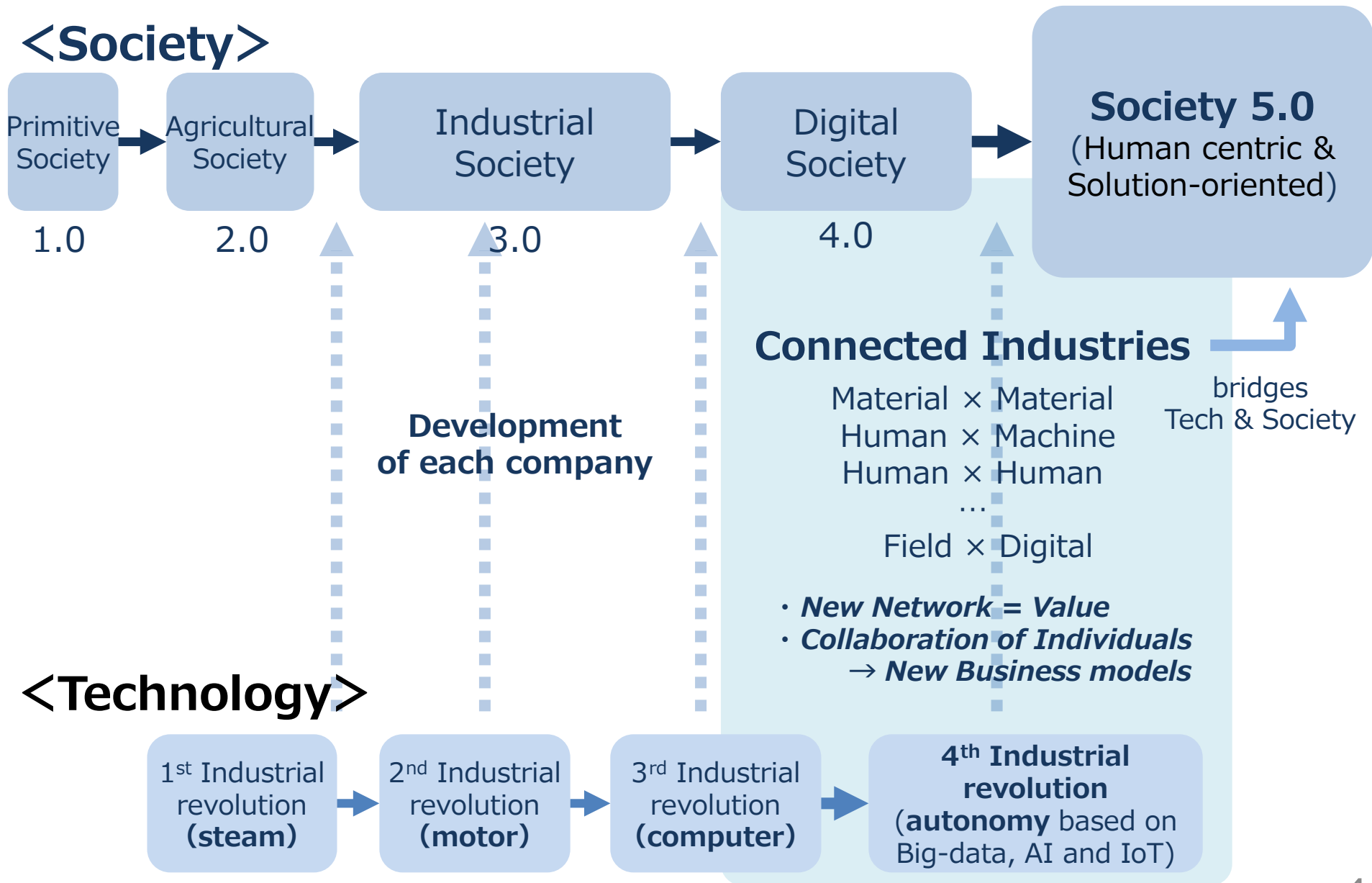
- Cooperation among individuals, companies, industries and countries are essential for effective solutions

3

### Human Resource Development

-- Knowledge and Skills for Digital Age --

# “Connected Industries” and “Society 5.0”



# 5 focused fields in "Connected Industries"(as of Oct 2017)



## Automated Driving/Mobility

- Data sharing/cooperation
- AI R&D + Human resource
- Mobility as a Service /Electrification



## Manufacturing/Robotics

- Int'l standardization of data format
- Cyber security
- Human resource development
- IoT tools for SMEs



## Bio tech/ Health care

- Data sharing/cooperation
- Launching AI tech platform
- Social acceptance for new tech



## Plant & Infra-maintenance

- Maintenance powered by IoT/AI
- Data sharing/cooperation
- Regulatory change



## Smart Life

- Specification of service
- Data sharing / cooperation

## common policy measures

- Data-use rule
- IT-skills and training
- Cyber-security
- AI (Artificial Intelligence)
- Intellectual Property and Standardization



Min. Mr. Seko on speech



Min Mr. Seko & Top managements of JP industries

- One of the most important fields of this concept is “Smart manufacturing Systems”. We have been promoting policies from several different view-points.

- ✓ **Use Cases**
- ✓ **International Standardization (IEC/ISO)**
- ✓ **Cyber security**
- ✓ **Regulatory reform**
- ✓ **Support of SMEs**
- ✓ **Skill development and Training**
- ✓ **R&D**
- ✓ **International Cooperation**